

**HIDING THE HELICOPTERS; THEY
KNOW YOU ARE THERE, BUT WHAT
ARE YOU DOING AND WHERE ARE YOU
GOING**

**A MONOGRAPH
BY
Major Gregory K. Butts
Infantry**

**School of Advanced Military Studies
United States Army Command and General Staff
College
Fort Leavenworth, Kansas**

First Term AY 98-99

Approved for Public Release Distribution is Unlimited

DMC QUALITY INSPECTED

19990804 038

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE		3. REPORT TYPE AND DATES COVERED MONOGRAPH
4. TITLE AND SUBTITLE <i>Hiding The Helicopters; They Know You Are There, But What Are You Doing and Where Are You Going</i>			5. FUNDING NUMBERS	
6. AUTHOR(S) MAJ Gregory K. Butts				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) School of Advanced Military Studies Command and General Staff College Fort Leavenworth, Kansas 66027			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) Command and General Staff College Fort Leavenworth, Kansas 66027			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY STATEMENT APPROVED FOR PUBLIC RELEASE: DISTRIBUTION UNLIMITED.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) See Attached				
14. SUBJECT TERMS <i>Air Assault, Tactical Deception,</i>			15. NUMBER OF PAGES <i>56</i>	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT UNLIMITED	

ABSTRACT

Hiding the Helicopters, They Know You Are There, But What Are You Doing and Where Are You Going? by Major Gregory k. Butts, USA, 54 pages.

This monograph discusses surprising the enemy through the use of deception during air assault operations. It focuses at the tactical level of war. Its purpose is to explore whether or not there are tactics, techniques, and procedures that can be used to deceive the enemy as to where the helicopters are going. Brief investigation has revealed that deception is not used often at Combat Training Centers and that the loss of surprise is the single most devastating cause of poor performance of air assault units.

This monograph first examines doctrine and theory. It concludes that doctrine is available, but with few practical examples. Theory supports surprise as a goal during all operations, but theorists support varying levels of commitment to the use of deception to attain surprise. The author concludes that in light of today's improved air mobility each theorist considered would support the use of deception during air assault operations.

After reviewing the doctrine and theory the monograph reviews several historical examples from World War II and Vietnam. Operation BERTRAM, which occurred in North Africa, D-day, and Corregidor are several of the operations reviewed. Operations reviewed from Vietnam include JUNCTION CITY and CEDAR CREEK.

The principle finding is that deception is a valuable part of the art of war during air assault operations. The vulnerabilities of helicopters and their thin skinned cargo makes surprise essential to the reduction of casualties, equipment loss, and risk. History gives us numerous examples of tactics, techniques, and procedures for using deception to gain surprise. This monograph provides an air assault planner with several methods that have proven successful in deceiving the enemy as to where the helicopters are going. Essentially, they allow a planner to hide the helicopters.

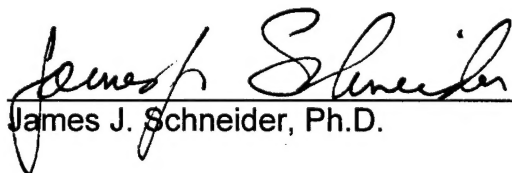
SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

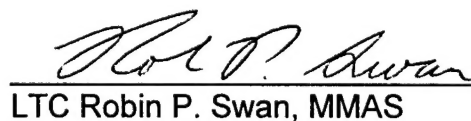
Major Gregory K. Butts

Title of Monograph: *Hiding the Helicopters, They Know You Are There, But What
Are You Doing and Where Are You Going?*

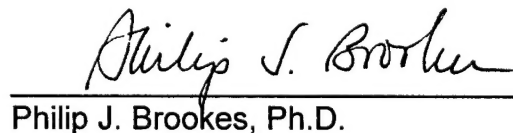
Approved by:


James J. Schneider, Ph.D.

Monograph Director


LTC Robin P. Swan, MMAS

Director, School of Advanced
Military Studies


Philip J. Brookes, Ph.D.

Director, Graduate Degree
Program

Accepted this 16th Day of December 1998

ABSTRACT

Hiding the Helicopters, They Know You Are There, But What Are You Doing and Where Are You Going? by Major Gregory k. Butts, USA, 54 pages.

This monograph discusses surprising the enemy through the use of deception during air assault operations. It focuses at the tactical level of war. Its purpose is to explore whether or not there are tactics, techniques, and procedures that can be used to deceive the enemy as to where the helicopters are going. Brief investigation has revealed that deception is not used often at Combat Training Centers and that the loss of surprise is the single most devastating cause of poor performance of air assault units.

This monograph first examines doctrine and theory. It concludes that doctrine is available, but with few practical examples. Theory supports surprise as a goal during all operations, but theorists support varying levels of commitment to the use of deception to attain surprise. The author concludes that in light of today's improved air mobility each theorist considered would support the use of deception during air assault operations.

After reviewing the doctrine and theory the monograph reviews several historical examples from World War II and Vietnam. Operation BERTRAM, which occurred in North Africa, D-day, and Corregidor are several of the operations reviewed. Operations reviewed from Vietnam include JUNCTION CITY and CEDAR CREEK.

The principle finding is that deception is a valuable part of the art of war during air assault operations. The vulnerabilities of helicopters and their thin skinned cargo makes surprise essential to the reduction of casualties, equipment loss, and risk. History gives us numerous examples of tactics, techniques, and procedures for using deception to gain surprise. This monograph provides an air assault planner with several methods that have proven successful in deceiving the enemy as to where the helicopters are going. Essentially, they allow a planner to hide the helicopters.

TABLE OF CONTENTS

Chapter I	
Introduction.....	1
Methodology.....	4
Chapter II	
Deception doctrine.....	6
Theory.....	12
Clausewitz.....	12
Jomini.....	13
Sun Tzu.....	14
Liddell Hart.....	15
Chapter III	
Historical review.....	17
World War II.....	17
Vietnam.....	22
Chapter IV	
Analysis.....	27
Limitations.....	37
Chapter V	
Conclusion.....	39
Endnotes.....	42
Sources consulted.....	48

Chapter I

Introduction

Surprise is the master key.¹

Surprise therefor becomes the means to gain superiority.²

The Air Assault Division is a unique organization with unique capabilities.³ One significant capability of an air assault unit is the ability to avoid all obstacles enroute to its objective. By avoiding terrain or obstacles an air assault force can strike the enemy where he is least expecting an attack or least prepared to defend. Logically, the ability to arrive from any direction at any time should give an air assaulting force the advantage of surprise. Unfortunately, according to results from past CTC rotations air assaulted units experience significant casualties, primarily because they did not have the element of surprise.⁴

Surprise, as defined in FM 101-5-1 is attacking the enemy at a time or place, or in a manner for which he is unprepared and which he did not expect. Surprise is a principle of war for the United States as well as most other countries. General Sir Bernard L. Montgomery placed surprise as the most important principle of war.⁵ Contemporary Soviet authors also accord surprise a dominant position, describing it as "unexpected action which leads to the achievement of success in battle, operations, and war."⁶ During World War II most airborne operations had the element surprise; at least during the paradrop or glider operation. Surprise was enjoyed simply due to the boldness of such operations. Today, the world is well aware of the aerial dimension of war, thus surprise is no longer guaranteed simply because an operation involves an air avenue of advance. The speed with which information moves across boundaries puts all deliberate airborne or air

assault operations at risk as never before. The attainment of surprise is a hard fought battle for the responsible commander and staff.

Powerful states, the United States included, have a tendency to rely on brute force. Victory is attained simply because we arrive with the most and overwhelm our opponent. This is certainly understandable, but not justifiable. The strong need not pay a higher price simply because they are confident of victory.⁷ Surprise must be actively pursued during operations. Conditions must be set that enable surprise over the enemy.⁸ The enemy must be deceived as to the true nature of our operations.

Deception, as defined in Joint Publication 1-02 are those measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce him to react in a manner prejudicial to his interests. The Army clarifies the goal as being able to make an enemy more vulnerable to the effects of weapons, maneuver, and operations of friendly forces.⁹

Deception is not practiced enough in the US Army. Less than 50% of the blue force operations at the National Training Center incorporate deception.¹⁰ In battles that have a successful blue deception plan blue experiences fewer casualties and has a greater probability of mission accomplishment.¹¹ Conversely, during these same operations red suffers greater casualties. Deception is a critical tool when attempting to maintain the element of surprise. Research done by the Center for Army Lessons Learned indicates that deception is rarely, if ever, used during air assault operations.

Western civilizations seem to have an aversion for deception. The ethical problem of deception has been recognized for centuries.¹² In addition to the moral issue; four, more practical notions, hamper the use of deception. One, deception costs too much and

uses assets that are already in short supply. Aviation assets are usually the limited resource in an air assault operation. Helicopters have limitations involving flight time per day, payload, range, and lastly they are expensive and available in limited quantities.

Two, deception is abstract while firepower is concrete. Deception is targeted at the enemy commander and it is difficult to wargame its effects. Maneuver commanders want to be able to measure the effects of assets, but unfortunately deception operations have no reliably predicted outcome. "Hoping" the deception plan works does not lend itself to comfortable decision makers.

Three, the effects of deception are not always known until after the battle, while the effects of firepower are readily apparent. Often, only in retrospect is it known whether or not a deception plan had any impact on enemy forces.

Four, deception is too intricate to execute and commanders opt for simplicity. Deception, by its very nature complicates a plan. Unfortunately, deception plans are usually developed after a course of action is approved and therefore take assets away from the main effort and increase the time required to develop the plan. Simplicity, a principle of war, is a goal for all plans (at least it should be). The challenge is to keep the plan simple while integrating deception, thus preserving the element of surprise upon the enemy.

According to FM 90-2, Battlefield Deception, three myths must be overcome to make deception work in the future. They are:

- 1) Advances in technology are perceived to make successful deception more difficult, if not impossible to achieve.
- 2) Commanders are reluctant to devote scarce resources, including time, to tasks that are considered less essential.

3) Force modernization, being primarily focused on high-cost force structure and material initiatives, has pushed low-cost, perceived intangibles like deception further into the background.¹³

These myths are some of what I am going to try to overcome in this monograph.

The purpose of this monograph is to explore the use of deception in attaining surprise during air assault operations. The assets used during air assault operations are perishable and must be preserved at a cost of all but mission accomplishment. Emerging Force XXI doctrine demands that US forces fight out-numbered, not out-gunned, and win. Social and political pressures demand that we minimize casualties and collateral damage. Deception operations are a tool to accomplish all of the above.

Emerging technology will enable US forces to dominate their battlespace, at least until our opponent is similarly equipped. As future opponents gain similar technology, battlespace dominance is going to be a function of our ability to analyze information and to shape the battlefield by forcing the enemy to conform to our fight. Deception operations can accomplish this. Faced with the continuing reduction in assets, we cannot fail to take advantage of such a useful multiplier.

Methodology

The question this monograph seeks to answer is: How can deception be used to preserve the element of surprise during air assault operations? In chapter II doctrine and theory are reviewed. United States Army doctrine will be reviewed including its goals at the bde/div level focusing on the potential impact on air assault operations. A brief overview of Russian doctrine is included. The theoretical views of Clausewitz, Jomini, and Sun Tzu are compared in reference to deception.

Chapter III is a historical review. The review is of operations from World War II to the present. The purpose of the review is to demonstrate the use of deception in airborne/air assault operations. United States, Allied, and Soviet experiences were considered. During the Vietnam War experiences of US units and Vietnamese units were considered.

The goal was to find examples of deception that caused the enemy to react in ways that FM 90-2, Battlefield Deception, specifies are goals for deception operations. The ways are: 1) the enemy masses or disperses as appropriate, 2) the enemy holds in place or commits...or commits too early or too late, 3) the enemy adopts force configurations that are inappropriate for his operations, or 4) the enemy adopts a style of maneuver that is inappropriate to our operations.

In chapter IV it all comes together. Doctrine, theory, and historical examples are analyzed to determine how deception can be effectively used by a unit during air assault operations. The goal is to provide a planner with possible options for the use of deception in order to preserve the element of surprise. The result will not be exhaustive, but it will be incisive and provide the planner with more techniques than he started with.

Chapter II

Deception Doctrine

*"In war-time truth is so precious that she should be attended to by a bodyguard of lies."*¹⁴

Winston Churchill
Tehran Conference, 1943

Joint Chief of Staff Publication 1-02 defines deception as those measures designed to mislead enemy forces by manipulation, distortion, or falsification of evidence to induce him to react in a manner prejudicial to his interests. The US Army definition is the same but adds that the goal is to make an enemy more vulnerable to the effects of weapons, maneuver, and operations of friendly forces.¹⁵

A common understanding of the levels of deception operations is necessary. Strategic deceptions influence the enemy's capability to wage in a theater. Operational deception occurs before the battle so that the tactical outcome of battles and engagements are favorable.¹⁶ Examples of operational deception in reference to an air assault unit might involve false intermediate staging bases or forward operating bases. The purpose of these false locations is cause the enemy to adopt a posture that is operationally exploitable.

Tactical deception plans exploit the situation immediately confronted by the tactical commander.¹⁷ Typically, tactical deception plans are developed in the context of an operational deception plan. Tactical deceptions manipulate the decision cycle of the enemy commander in contact.¹⁸ Deception planning must support accomplishment of the commander's mission. Deception must facilitate surprise, it is not an end in itself.

FM 100-5, Operations, states the deception aids in the probability of achieving surprise. Surprise is a principle of war and, therefore should be considered in every

operation. As with the principles of war, deception must always be considered, but there is no doctrinal requirement to use deception during every operation. In fact, using deception with every operation is probably unwise.¹⁹ The goal of deception is to mislead the opposing commander, prompting him to plan his activities in a manner that unwittingly serves the commander's objectives.²⁰ Deception plans do not stand alone and must be integrated into the higher units operations.²¹ Occasionally, an operation itself is the deception. Such a deception operation is typically a demonstration, feint, display, imitative electromagnetic deception, or ruse.²²

The Army's primary doctrine for deception operations is FM 90-2 dated October 1988. The proponent for FM 90-2 is Headquarters Training and Doctrine Command; however, the US Army Intelligence Center and School was the primary author.

The staff agency responsible for deception is the operations staff, the G3/S3. Up to division level there is no special staff for planning or executing deception operations. Therefore, as operations are planned it is critical that deception is considered with each course of action. At corps level a special staff is resourced in the G3 section. The G3/S3 is responsible for good reason. Deception plans are as much a part of the scheme of maneuver as the real plan and all courses of action are developed by him. Operation plans and orders and fragmentary orders are driven by the G3/S3 and may require adjustment to the deception plan.²³ All staff agencies assist with the deception operation; for example, the G2/S2 is best suited to identifying where the enemy is vulnerable to deception. Although we have portrayed total staff involvement in the deception plan, there is no requirement for any body to know it is a deception plan. The commander may elect to keep the information to himself, to keep the information close hold, or to form a special ad

hoc staff to control the deception. During many operations in Vietnam, operations security (OPSEC) was the primary means of deceiving the enemy.

The commander is involved with a deception plan through the military decision making process. Examples of what he might consider and discuss in his initial guidance are:

- 1) Should deception be considered in support of the main objective?
- 2) Is the enemy susceptible to deception?
- 3) What percentage of friendly of friendly forces can be used to support deception?
- 4) Should deception be used in support of supplementary missions?
- 5) Are units used to support the deception effort needed for the success of the main objective?
- 6) If yes, what is the maximum time allowed for the units to stop their deception efforts and redeploy to the main objective area?
- 7) Does the success of the operation depend on the success of the deception?²⁴

These examples are not all inclusive but are highlighted in FM 90-2 as starting thoughts.

The focus of all deception operations is on the enemy. Deception is based on what you want the enemy to do, not what you want him to think.²⁵ Tactical deception typically has the desired outcomes of causing the enemy to: mass or disperse, hold in place or commit or commit prematurely or too late, adopt inappropriate force configurations, or adopt a style of maneuver inappropriate to friendly operations. In addition to physical effects electronic and obscurant based deception can degrade the enemies command, communications, and control capabilities(C³), make him question his intelligence collection and analysis system, and induce incorrect maneuver decisions.²⁶ Caution must be taken to insure that the desired goal or endstate of a deception plan is consistent with the enemies military experience and that the desired picture conforms to the enemy's expectations of our operations.²⁷

Four types of deception techniques are used to present the story: feints, demonstrations, ruses, and displays. Feints are limited objective attacks that give the appearance of the main effort. They are offensive in nature and require contact with the enemy. The timing of a feint is critical. A feint designed to force the commitment of the enemy reserve may attack before the main effort. A feint designed to draw fires or forces from the main effort may need to attack at the same time as the main effort. Often times, a feint is labeled as a supporting effort during an attack.²⁸

A demonstration is similar to a feint with one notable difference, no contact with the enemy is intended. Demonstrations lack the realism of a feint, but have some advantages. Demonstrations conserve combat power and the lack of physical contact preserves the force for follow-on operations. A demonstration can be accomplished by a much smaller force since no contact is necessary. In fact, simulation devices may even be used when the enemy's reconnaissance capabilities are easily deceived.²⁹

Ruses are tricks designed to deceive the enemy to obtain an advantage. A ruse is characterized by the deliberate exposure of false information to the enemy's collection means.³⁰ An example of a ruse occurred during World War II when Rommel disguised Volkswagens to look like tanks. The effect caused the allies to think that his force was stronger than it actually was.³¹

Displays mislead the enemy's visual senses, including his observation by radar, camera, infrared device, or the human eye.³² Examples of a display would be the portrayal of a forward operation base or tactical assembly area designed to attract the enemy's attention while not exposing the actual locations.

Deception, as it pertains to air assault operations is discussed in FM 71-100-3.

The manual highlights several key points mentioned earlier, but does not give any examples or tactics, techniques, or procedures that assist in the accomplishment of deception. It acknowledges that deception is an important combat multiplier and its goal is to manipulate enemy behavior and create opportunities for exploitation.³³ Deception operations should be centrally executed when possible. In keeping with this, FM 71-100-3 stresses that a commander must dedicate adequate resources to insure that the deception appears real. Deception operations must be integrated into each course of action and not undertaken as a separate operation. Guidance that the Division Commander should give during the military decision making process is:

- 1) What he wants the enemy to do.
- 2) How the division can best make the enemy do it.
- 3) What forces and material he will dedicate to the effort.
- 4) How he expects the enemy to behave.
- 5) How the division can benefit from that behavior.³⁴

A review of FM 7-20, The Infantry Battalion and FM 7-30, The Infantry Brigade and associated Mission Training Plans reveals that deception is rarely mentioned. Tactics, techniques, and procedures for deception are not discussed. However, a key standard in many tasks is that the main body is not surprised. Clearly the peril of being surprised is recognized. Thus, the advantage of surprising the enemy is recognized. Deception is mentioned synonymously with security and surprise in the above manuals.

As an interesting addition, the former Soviet Union has extensive deception doctrine. Most of their doctrine focuses on the strategic and operational levels of war. Historical examples from World War II highlight Soviet failures during initial attempts at deception. Only when the Soviets seized the initiative could they use deception

successfully. By the Soviet model, tactical deception is a natural by-product of a successful operational deception. During World war II the Soviet Union practiced deception on a scale never seen before nor seen since. Their 1944 regulations specified that the enemy was to be mislead by:

- 1) Concealing real objects from enemy reconnaissance and observation.
- 2) Changing the external appearance of objects.
- 3) Setting up dummy objects and by feints.
- 4) Spreading false rumors.
- 5) Sound discipline and by artificial noises.
- 6) Masking the operation of radio, by setting up dummy radio nets, and by radio deception.³⁵

In conclusion about doctrine. Michael I. Handel said this:

Unfortunately, deception is a creative art and not an exact science or even a craft. For that reason, it is difficult to teach someone how to deceive unless he has an instinct for it. This explains why, despite the numerous wartime memoirs and detailed military histories which discuss deception, little has been written on the theory of deception or how to practice it. It is normally assumed that some military or political leaders are 'deception minded' while others are not. There is probably no systemic, structural way to teach the art of deception, just as it is impossible to teach someone to become an original painter. Perhaps the only way to learn this art is through one's own experience.³⁶

Deception doctrine is present and available; however, there is little in the way of tactics, techniques and procedures. Perhaps this is a reflection of the reluctance of western armies to develop standard methods of deceiving the enemy. Again, some authors question the development of standard deception techniques, at least at the unclassified level. Many believe that written deception doctrine defeats the intent of deception because if you write it down and issue it as doctrine then you have essentially "tipped your hand". Or perhaps it is a clear demonstration of the lack of experience of US doctrine writers in reference to

deception during air assault operations. This monograph intends to give the reader some insight as to how to use deception during air assault operations.

Theory

“The ultimate goal of stratagem is to make the enemy quite certain, very decisive, and wrong.”³⁷

Theory on deception operations is found in many places. Some from the masters; Clausewitz, Sun Tzu, Jomini, and Liddel Hart. Modern sources are available as well. Much of it seemed to articulate our own doctrine better than FM 90-2.

Clausewitz

Clausewitz did not place much value on surprise or deception. He realized they were factors, but not important ones. He felt “it would be a mistake...to regard surprise as a key element of success in war”.³⁸ He placed more value on surprise as a tactical device. Clausewitz was a product of his time relative to attaining surprise. Wars were not come as you are affairs; they involved months of preparation and mobilization.

Clausewitz valued surprise for its effects on an enemy's spirit. He recognized the psychological effects and the ability of surprise to make the enemy incapable of making coherent decisions.³⁹ Surprise is very time sensitive and more easily carried out in operations requiring little time. Clausewitz equates surprise with tempo and the greater the tempo of an operation the greater the potential for surprising the enemy.

As with surprise, Clausewitz placed little value on deception. He used the term “cunning”. Deception required a considerable expenditure of time and effort, and the costs increased with the scale of the deception and were rarely worth the effort.⁴⁰

Clausewitz asserted that history failed to show any successful deception that was worth

the price. He did not appear to consider Napoleon's operations during war the with Austria in 1809 as examples of successful deception operations. Perhaps he left deception to the realm of the genius; therefore, he did not consider it a functional part of the theory of war. Interestingly, he uses the term "sly mobility" and asserts that the forces available to supreme commanders simply do not have the mobility necessary to take advantage of deception.⁴¹ Perhaps the air mobility of today's forces would alter Clausewitz's view of the value of deception.

Clausewitz's views of surprise and deception were molded by his experiences. His views were linear in nature, two dimensional, and focused on land warfare. The development of air forces and air mobility, especially for combat forces, would have modified his views on the use of surprise and deception.

Jomini

Clausewitz and Jomini agree on deception and surprise. They were both a product of their environment in which the size of armies had far outpaced the developments in mobility or communications. Jomini believed that surprise was rarely achieved because of the size of armies and the amount of time that it took to mobilize. However, Jomini does give us an example of deception. He mentions, in his chapter on diversions and great detachments, that one reason to separate a force from the main body is "to make a demonstration to draw the enemy in a direction where you wish him to go, in order to facilitate the execution of an enterprise in another direction".⁴² He stresses that such an adventure is always secondary in nature and must not reduce the chance of success at the decisive points.⁴³ Jomini in this respect, concurs with US doctrine in that the resources

required for the deception must be considered and that a deception plan must be part of the overall plan to avoid a disjoint operation and misutilization of limited resources.

Clausewitz and Jomini placed the greatest weight on destruction of the enemy's force. Specifically, the body of soldiers that made up his main force. Attention was paid to lines of communications or other decisive points, but the battle was won and lost by a fight between the main army of each side. Whoever had the most on the battlefield at that time was most likely to win, thus Jomini's reluctance to separate in forces into unnecessary detachments. As with Clausewitz, Jomini would probably place greater weight on deception with modern technology and weapon systems.

Sun Tzu - *"All warfare is based on deception"*

Sun Tzu differs significantly from Clausewitz's perception of the value of surprise and deception. Throughout The Art of War, Sun Tzu alludes to surprise and deception. Deception is the most frequently discussed theme. Unlike Clausewitz, Sun Tzu believes that gaining surprise over the enemy is always possible and should always be on the mind of the commander.⁴⁴ While Clausewitz saw their limited utility at the tactical level of war, Sun Tzu values their use at all levels of war. Surprise is gained by a voracious appetite for information on the enemy, yourself, and the situation. The more known about the enemy the easier it is to surprise him. Conversely, information about yourself must be carefully guarded. Sun Tzu used secrecy, including keeping information from his subordinates, to preserve the element of surprise or to enhance the effects of deception.

Sun Tzu believed that the fundamental principle for attacks was to "go forth where they do not expect it, attack where they are not prepared."⁴⁵ Manipulation of the enemy was the best way to achieve a victory according to Sun Tzu. The principle method of

concentrating ones own forces while forcing the enemy to disperse is through deception.⁴⁶

Deception is based on a thorough knowledge of the innermost thoughts of the enemy.

Never show the enemy the truth. Show him strength where you are weak. Portray weakness where you are strong. Reinforce the preconceived notions the enemy has about you. Use his intelligence collection effort against him. Much of US doctrine is supported by Sun Tzu, unfortunately, we do not have the same voracious appetite for using deception.

Liddell Hart

Liddell Hart is more current than either Clausewitz or Sun Tzu. He wrote most of his material in response to the stalemate of World War I. In his opinion time and surprise were the two most valuable elements in war.⁴⁷ Sun Tzu would have agreed. The most valuable idea to emerge from Liddell Hart was the concept of showing the enemy the truth along with deceptive information.⁴⁸ Hart conducted analysis that showed that surprise was beneficial to an attacker. His analysis showed that attacking forces did not need the traditional 3 to 1 ratio to gain success. His analysis concluded that successful attackers who did not have the element of surprise had average force ratios from 1.4 to 2.5 to the defenders 1. While successful attackers who did have the element of surprise had average force ratios of 1.1 to 1.4 to the defenders 1.⁴⁹ Surprise clearly is a force multiplier.

In conclusion about doctrine. Several accepted theories of war support the admirable goal of surprising the enemy. These same theories support the use of deception to attain surprise, but to different degrees. Theorists do not agree about the price a commander should be willing to pay in terms of resources in order to surprise the enemy. Sun Tzu would argue that surprise is decisive and expensive, and worth it. He would

expend significant assets to resource a deception plan. Clausewitz and Jomini would argue that surprise is important, but difficult to attain and rarely decisive. They would not commit significant assets to a deception effort. They were products of their time and accustomed to massive slow moving armies that took weeks to mobilize. Considering today's mobility and communications, The author believes they would support deception as a valuable way of attaining surprise over the enemy.

Chapter III

Historical Review

History is full of examples of deception. Most occur at the operational level of war and result in a surprise attack against an unprepared defender. Perhaps it is the large scale examples that are recorded for posterity. The author believes it is because most operational level deceptions require an extensive plan and are created by a group and are recorded better and therefore remembered after the operation. Many tactical level deception plans exist mostly in the minds of the commander and a few trusted operators. Typically, they are not extensively planned or recorded. Many operational level deceptions often occur during a posturing phase between forces in conflict, but not necessarily in contact. Tactical level deceptions often occur between forces in contact, not necessarily in full-scale combat. At either level of operation, forces may be probing or conducting reconnaissance against their opponent. After all, to be deceived someone has got to be observing what the other side is doing. In today's vernacular operational level deception occurs most often as the result of a deliberate military decision making process while tactical deception is often the result of a hasty military decision making process.⁵⁰

World War II

The U.S. Army rarely practiced deception during World War II. As stated earlier, most examples are at the operational level of war. Well known examples include convincing the Germans that the cross channel invasion would be at Calais as opposed to any place else. The plan reinforced German expectations. The allied plan included the use of double agents, information leaks, deceptive troop positioning, and the creation of a very

public, but unknown to the Germans, hollow army commanded by the well known General George S. Patton. The Germans were swayed by the deception plan. They believed that the landings at Normandy were merely a demonstration and not the main effort. They believed that Patton would lead the main attack when it occurred and that it would be at Calais. Because they felt Normandy was a diversionary operation they did not reposition any reserve forces to counter the landings. Instead, they remained postured to react to a landing at Calais.

Deception was also incorporated into the airborne assaults in support of the Normandy landings. Several false airborne assaults were done to confuse the Germans as to where the actual drops were occurring. These assaults included dummies and sonic devices that replicated an airborne assault. In addition to the false assaults, dummies were incorporated into the actual assaults in order to portray the parachuting of larger forces.⁵¹ The intent was for the Germans to recognize the dummies as an obvious attempt by the allies to convince them that the Normandy landings were the main attack and convince them to commit their reserves so they would be unavailable to counter the main effort eventually going into Calais.⁵² Additionally, as with Patton's false army a false airborne corps was created in Britain to convince the Germans that the allies still had enough airborne forces to support a landing at Calais. It is unclear exactly which parts of the deception plan convinced the Germans not to immediately commit forces to repulse the allies. Undoubtedly the combined effects of all actions was decisive. The delay in the Germans reactions allowed the allies to mass enough combat power to prevent the Germans from kicking the allies off the continent.

An excellent example of tactical deception occurred before the Normandy invasion in Africa.⁵³ Operation BERTRAM occurred in the summer of 1942. British General Montgomery and German Field Marshal Rommel had stalemated vicinity El Alamein. Rommel did not have the ability to sustain an all out attack against the British. And Montgomery did not have the combat power to destroy the Germans if the Germans could mass their forces against the British main attack. Montgomery needed to prevent the commitment of the German armored reserve for at least four days. Forces were arrayed along a 35 mile defensive line oriented north to south. The British were on the East facing West and the Germans in the West facing East. Due to terrain and lines of communications the best avenue of advance for British forces was to attack in the North. The Germans were well aware of the situation and strengthened their positions and placed their armored reserves in the north. Montgomery needed to convince the Germans that his main effort would attack in the south. How do you hide forces in the desert? You don't. They must be camouflaged to look like something else.

Montgomery's goal was to attain a favorable force ratios in the north along his avenue of advance.⁵⁴ His deception objective was to get the Germans to position their armored reserve in the south and to delay their commitment for four days after the British attack. In support of his objective the following actions occurred.

- 1) Training exercises by armored formations emphasized a generally southerly orientations in their movements.
- 2) Known enemy agents were fed material claiming that the offensive would not occur until early November because of mechanical problems with the newly arrived American Sherman tanks.
- 3) Artillery concentrations in the north were camouflaged as small scale logistics dumps. Numerous dummy artillery sites were built in the south.
- 4) Tank concentrations in the north were camouflaged as marshaling areas for logistics vehicles with the use of simulated truck covers.

- 5) Simulated logistic activity in the south portrayed the support needed by a large armored force to conduct offensive operations, while concealing the real support operations occurring in the north.⁵⁵
- 6) A false water pipeline supporting operations in the south was built to establish a false no earlier than time for the British attack (November 1942), the objective was to convince the Germans that offensive operations would not start until the pipeline was complete.⁵⁶
- 7) Montgomery initiated the attack with infantry which complicated the Germans attempting to determine where the armored main attack would occur.

When the British attacked on 23 October 1942, the Germans were not prepared. Rommel was in Germany based on the recommendation of his staff that the attack would not start until November. The armored reserves were initially retained in the south and were not committed in the north until the fourth day and when they arrived they had little effect.⁵⁷ Operation BERTRAM is an excellent example of successful tactical deception. The operation was integrated into the overall operations plan and the objective was clearly attained. Although no forces were inserted via airborne assault, false airborne assaults were used to force the Germans to keep a force operating in the rear for security. Merely the threat of airborne forces operating in the rear area along lines of communications forced the commitment of units to the rear area fight.

Several other techniques for deceiving the enemy can be gleaned from operations during World War II. Prior to the D-day invasion the allies repeatedly joined troops with aircraft in Britain. These repeated events desensitized the Germans to such actions. Thus the Germans perceived no higher threat and took no additional preparatory actions when this occurred immediately prior to the D-day invasions.⁵⁸ The German delay gave the allied airborne assault valuable time once on the ground. Interestingly, after D-day the German forward commands kept forces prepared to react to allied airborne assaults.⁵⁹ As

a side note, the Germans realized early on that the allies used airborne forces for tactical not strategic purposes. Therefore, they had been desensitized to the possibility of an airborne operation being a main effort or a separate operational level effort. They knew that the pattern of allied operations involved a ground attack to link up with the airborne assault.

MacArthur also used airborne forces during his Island hopping campaign in the Pacific. As with the European operations, the Pacific operations always had the pattern of an airborne assault followed by the amphibious landing. The recapture of Corregidor was one notable exception. The allied intelligence estimate of Corregidor said that only one usable drop zone was available and this would be extremely difficult if not impossible to use. The Japanese had made the same conclusion and postured their forces to be able to initially react to any airborne assault and then to reposition to repulse any amphibious landing.⁶⁰ The attack on Corregidor was planned as an almost simultaneous attack. The airborne assault would occur as the amphibious forces approached the beach. The proximity of allied naval forces on the Philippine mainland to Corregidor made preparations for the amphibious assault observable to the Japanese on the Island while preparations for the airborne assault were not. Waiting until the last minute, deciding that an airborne assault was not imminent, the Japanese repositioned for the amphibious attack. Just prior to the amphibious attack the airborne assault landed. The result was the seizure of decisive terrain and a surprised Japanese force that was attacked from within. Additionally, the airborne forces had access to the Japanese land line communications node and managed to completely destroy all Japanese communication on the island.

The Russians also used deception during their airborne operations during World War II. While the allies dropped dummies with real airborne assaults, the Soviets dropped real paratroopers with dummies. During operations of the Soviet 4th Airborne Corps from 26-27 January 1942 seven drop zones were used.⁶¹ Real paratroopers were used on all, but seven were diversionary with the purpose of preventing the Germans from discovering where the real assault landed until it was too late. The diversionary forces immediately attacked targets in order draw the Germans from the real insertion.⁶² The result was a German rear in disarray attempting to locate the main airborne forces and forced to defend in multiple directions at multiple sites.

Vietnam

Detailed examples of the use of tactical deception in Vietnam are difficult to locate. Even the Combined Arms Research Library at Ft. Leavenworth Kansas has few examples of deception at the tactical level. The reasons were discussed earlier in this monograph. Every source, including books, combat after action reviews, and historical monographs written by Vietnam veterans agreed that surprise was critical to the success of air assault operations. Most also agreed that deception was a critical combat multiplier during air assault operations. Operations security was the most practiced method of preserving the element of surprise. During the Vietnam War the most lucrative intelligence source for the Viet Cong (VC) and North Vietnamese Army (NVA) was the Republic of Vietnam Army and the Government of Vietnam. In fact, the majority of deception operations in Vietnam by the 1st Infantry Division involved deception against the Army of the Republic of Vietnam and the Government of Vietnam.⁶³ Additionally, the U.S. in many ways was its own worst enemy because of our rigid use of standard operating

procedures and tendency to use patterns of operations that had been successful during previous operations.

The standard operating procedures, as viewed by the Viet Cong, that were indicators of an impending U.S. air assault operation were:

- 1) MOHAWK reconnaissance aircraft operating over the area.
- 2) Reconnaissance and observation aircraft will fly over the area of operations and landing zones 24 hours before the anticipated air assault.
- 3) Preparatory fires on a landing zone by close air support and artillery.
- 4) Forward air controllers (FAC) on station.
- 5) Flares used at night over open ground often indicated an approaching air assault.
- 6) Helicopter operations will normally take place in fair weather, during daylight, and on exposed and even terrain.⁶⁴

Arguably, several other indicators are available that were not discussed by the captured documents. Insertion of pathfinders and other ground reconnaissance, as much as 48 hours ahead of time, to locate or mark potential landing zones is also an indicator. These forces enter the area of operations with special equipment for the purposes of marking landing zones.⁶⁵

During the Vietnam War enemy forces also used diversionary tactics to lure helicopter forces into an area. Small units would use a large volume of fire to draw inserted forces and their supporting helicopters from someone else or a more valuable strategic target. Enemy forces would monitor U.S. radio frequencies and use the same color smoke to mark another landing zone for purposes of ambushing the incoming helicopters. As a response to U.S. search and destroy operations that involved an air assault reaction to small enemy patrols the VC/NVA would dig-in large caliber machine guns on probable landing zones and use lightly armed soldiers as bait. As the heli-borne

response arrived the dug-in machinegun would engage.⁶⁶ In addition to the dug-in machineguns various booby-traps crafted from mines, bombs, hand grenades, artillery shells and even bamboo spears triggered by rotor downwash were waiting.⁶⁷

Operation JUNCTION CITY, 22 February 1967 to 14 May 1967, is an example of tactical deception in Vietnam.⁶⁸ In support of Junction City, from 3-21 February 1967, operations GADSDEN and TUCSON were done to deceive the enemy as to the true intent of future operations. Their purpose was to conduct search and destroy operations. Their end state included positioning for operation JUNCTION CITY. The search and destroy operations were designed to appear as routine and uncoordinated efforts by two different divisional elements. The supporting movements placed units on the fringes, within rotary range, of the area of operations for JUNCTION CITY. Operations security for JUNCTION CITY was extensive. Vietnamese forces were briefed at the highest levels only at the last minute. Non-organic helicopters were flown in under the cover of darkness just prior to the operation. Even Air Force airlift in support of an airborne operation was given different drop zones until two days prior.⁶⁹

The deception target was VC/NVA forces in the area of operations for JUNCTION CITY. The deception objective was not to alert them as to the impending search and destroy operation that encompassed the area of operations of several significant VC/NVA units and support concentrations. The primary method, aside from operations security mentioned earlier, was to conduct very little reconnaissance of the area of operations for JUNCTION CITY and to use operations GADSDEN and TUCSON to give the appearance of two distinct unrelated tactical operations. Thus, avoiding a pattern of operations that would lead the VC/NVA to expect an operation.

The scheme of maneuver for the initial phase involved a horseshoe shaped blocking position around the area of operations. The interior of the horseshoe encompassed approximately 360 square kilometers. Movement to the blocking positions was a combination of ground attacks, airborne assault, and air assaults. The movements were as simultaneous as possible. The only limitation was the number of available helicopters. By the end of the first day all blocking positions were occupied.⁷⁰ Contact on landing zones was minimal; certainly, not enough to suggest that the operation had been compromised. Destruction of the enemy forces encircled by the horseshoe was accomplished by a ground attack into the open end of the horseshoe.

Operation JUNCTION CITY was a success. Whether or not the deception plan worked is debatable. Numerous caches of supplies and other equipment was captured or destroyed and 2,728 enemy soldiers killed versus the Americans 282 killed and 1,576 wounded. The goal of the deception plan was to prevent the early escape of the VC/NVA forces from the area of operations. The limited number of major enemy contacts during the operation lead the 1st Infantry Division commander to state that they had difficulty "gaining complete surprise".⁷¹ He suggested that even with the elaborate deception scheme the amount of equipment and movement needed to support the seven maneuver brigades gave the enemy some warning. However, on the first day of the operation enemy contact was minimal. None of the landing zones were protected by significant enemy forces. The fights that occurred were minor and very short. The lack of enemy contact would suggest that the enemy had little warning and was unable to prepare for the air assaults.

In addition to the previously mentioned deception techniques others were used. In an effort to show no interest in a particular area, no landing zone reconnaissance was allowed prior to the initiation of operations during operation CEDAR CREEK.⁷² Such a tactic has its own risks, but is an option that varies the pattern of operations. Some techniques involved clandestine insertion of pathfinders via ground or parachute. If insertion of reconnaissance must be via helicopter, it can be done one to two days march from the area of operations. The elements move to the area of operations and locate, mark and report the landing zones to follow on elements.⁷³ When insertions were by helicopters, they would land at multiple landing zones to prevent the enemy from knowing the exact location of the insertion.⁷⁴ If the helicopters are available then several lifts of helicopters were flown to deceive the enemy as to how large of a force had been inserted. The same uses of multiple landing zones was used during the insertion of the main body.⁷⁵ If enemy observance could not be avoided then several landing zones were reconnoitered. One step further was to prepare three or four landing zones with artillery and close air support, while only using one or two.⁷⁶

In Vietnam several techniques were used involving actions immediately prior to an air assault to avoid indicating an incoming air assault and prompting the enemy to attack to the sound of the helicopters. Command and control aircraft would avoid the area until the first lift was on the ground. The accompanying helicopter gunship would arrive with the lift helicopters as opposed to before. And finally, the artillery and air force preparatory fires would be short, but extremely intense. Once forces were on the ground, one technique that “duped the VC into a sense of safety” was to remove all helicopters from

the ground area of operations.⁷⁷ The effect was to give the appearance that the Americans had left or weather had stopped any aircraft from flying.

During many operations an air assault force was the quick reaction or reserve force. During operations of the 101st Airborne Division in 1967 an armored force was used as a reaction force. The infiltration of a ground force at the same time as the air assault maintained an element of surprise.⁷⁸ The ground force was infiltrated in order to assist in the seizure of landing zones for air assaulted troops or to reinforce forces attacked on the landing zone. The effect was enemy forces running into the woods to avoid the armor, only to be surprised when the air assaulted dismounted forces pursued or enemy forces expecting lightly armed dismounted forces as opposed to well protected mechanized force.

Vietnam was the trial by fire for air assault operations. Clearly, such a force gives the commander several distinct capabilities to exploit against the enemy. Along with the capabilities comes several limitations. The most significant of which is the helicopters vulnerability to even the lightest small arms fire. Anyone interested in conducting air assault operations has a vested interest in preventing the enemy from finding the helicopters. Deception is a way to hide the helicopters.

Chapter IV

Analysis

*"Faced with the future of continuing reduction in assets, we cannot afford to eliminate such a useful multiplier from our plans."*⁷⁹

The use of deception was most supported by Sun Tzu. He believed that he could win all battles through the use of deception to surprise the enemy. He valued deception as a possible technique to support the defeat of the enemy without destroying his army.

Clausewitz and Jomini clearly valued surprise against the enemy, but were not willing to put forth the effort required to support a deception effort during their times. Since the deaths of Clausewitz and Jomini, technology has changed the speed with which decisive force can be moved around the battlefield and the ability of forces to see each other.

Given today's circumstances, all three would agree that deception is a powerful multiplier in the equation to gain surprise over the enemy. Air assault operations are perhaps the most flexible of all mobility options, but also the most vulnerable. Deception, therefore, must be considered during each and every air assault operation.

As a quick review, the four goals of a deception operation according to FM 90-2 are:

- 1) The enemy masses or disperses as appropriate.
- 2) The enemy holds in place or commits...or commits too early or too late.
- 3) The enemy adopts force configurations that are inappropriate for his operations.
- 4) The enemy adopts a style of maneuver that is inappropriate to our operations.

These goals are not inclusive, but give a planner some goals to apply while looking at courses of action.

Deception during air assault operations can be separated into two categories.⁸⁰

Preventing the enemy from expecting an air assault operation in a given area and preventing the enemy from knowing when and where the helicopters are going, and delivering their cargo, once they are committed. The analysis will consider each category separately.

Preventing the enemy from expecting an air assault operation in a given area involves several factors. The maximum planning range for a typical air assault operation is eighty nautical miles. This range is well known to U.S. air assault planners and probably to potential adversaries. The range is based on factors including planned helicopter load, speed, fuel use, and altitude. The fuel requirements for large numbers of helicopters rival the fuel requirements of a heavy division, therefore the location of the fuel storage or refueling sites are also critical. Knowing the range and the location of the helicopter's operating base will allow an enemy to template the potential areas that an air assault could occur. This information is critical to a deception planner.

During operation BERTRAM Montgomery used false logistics bases to deceive the enemy as the avenue of advance on which his armored forces would attack. False logistics bases or hidden logistics bases will deceive the enemy as to the possibility of an air assault operation occurring in a given area. Also, the use of mobile fuel assets such as 5000 gallon tankers or 2500 gallon HEMMT fuelers can deceive the enemy as to the possible range of air assault operations. Operations involving small numbers of helicopters can be refueled using auxiliary tanks in CH-47s or C-130s. Fuel can also be slung loaded.

Positioning the infantry and helicopters at different locations can also be used to deceive the enemy. During operation JUNCTION CITY helicopters were linked up with

the infantry at the last minute under the cover of darkness. Moving the infantry closer to the objective without the helicopters has the effect of forcing the enemy to consider ground avenues of advance as well as air avenues of advance. He must spread out his forces to protect all possible threats.

During World War II the Allies desensitized the Germans to the possibility of an airborne operation. By linking troops with aircraft often and not actually conducting an airborne drop the Germans grew complacent and did not take defensive measures when the actual drops occurred in support of D-day. Air assault units must continually demonstrate their capability in order to desensitize the enemy as well. Also, massing helicopters often, as in a brigade size air assault will desensitize the enemy.

The use or non-use of reconnaissance can also be used to prevent the enemy from expecting an air assault. Active reconnaissance by low level aviation assets, as in Vietnam can telegraph to the enemy where an air assault is going. As discussed earlier, reconnoitering numerous sites over a long time, while using some and not using some for air assault operations can also desensitize an enemy force. Obviously, time is required to develop a pattern of use or non-use. Also, in a high threat environment the conditions change and a rotary wing based reconnaissance may not be feasible.

Insertion of ground reconnaissance is always preferable. Ground reconnaissance actively locates enemy forces on possible landing zones throughout the area of operations and can act as terminal guidance for helicopters. Commanders always feel more comfortable with someone on the ground. However, the insertion is usually detected by enemy forces and telegraphs to the enemy that other forces are coming. Several techniques are available to deceive the enemy.

Reconnaissance can be inserted via airborne drop or ground. However, the tactical level air assault commander may not have airborne assets at his disposal or may not want to risk a ground movement through enemy held territory. Therefore, other methods must be considered. As in Vietnam, the helicopters can insert the reconnaissance two to three days away from the area of operations. This option increases the risk of the patrols not reaching their objective. Reconnaissance forces can rappel from helicopters that cannot land due to foliage or gradient. Two techniques were found in Vietnam after action reviews.

Helicopters that transport the reconnaissance forces land at several drop off points throughout the area of operations. The enemy cannot determine which drop off point or points were used. This technique discusses only one set of helicopters. The second technique involves the use of several sets of helicopters. The helicopters operate as in the first technique; however, the enemy has no idea how large of a force was inserted since only some of the helicopters will have actually inserted forces. In the first technique the enemy can determine a maximum number of troops that could have been inserted, typically a manageable number. The second technique, if resourced with sufficient helicopters, may force the enemy to reposition forces to prevent the reconnaissance from accomplishing it's mission. Thus the enemy is now reacting to our forces and adopting a force disposition not favorable to his operations.

Several techniques have been presented that will deceive the enemy as to whether or not an air assault operation can be expected in a given area of operations. Once an air assault operation begins the task changes. Now the enemy must be deceived as to when and where the air assault operation is going. The air assault planner must prevent the

enemy from determining when and where the helicopters are going to deliver their valuable cargo.

Preventing the enemy from knowing when and where the helicopters are going, and delivering their cargo is different from preventing the enemy from expecting an air assault in a given area of operations. If the enemy does not expect an air assault then most likely he will not have an organized response, thus the enemy has assumed a posture inappropriate against air assault operations. The enemy will be reacting piecemeal, relying on a general reserve, or repositioning previously committed forces to react to the air assaulted forces. If the enemy expects an air assault then he will have allocated specific forces or fires to react to the air assault.

The enemy that expects an air assault in a certain area of operations is the planners toughest challenge. The planner must determine what enemy forces and fires have been allocated and then he must develop a deception plan that forces the enemy to misapply the reaction assets in either space or time. This monograph will not address the subsequent attack by fires or maneuver of the enemy forces allocated to react to the air assault.

In a low-intensity conflict environment the enemy rarely has enough assets to destroy an air assaulted force once it has been inserted. That is not to say casualties will not be taken. An air assault operation is most vulnerable during a period that starts as the helicopters comes to within small arms range of the landing zone and ends as the helicopters depart the landing zone. During this time any weapon can acquire the helicopters and create havoc among the force. The vulnerable period is the same for mid and high-intensity conflict; however, significant artillery fires and maneuver forces must be

added to the enemy assets and the vulnerable period is extended to include the time that it takes for the air assaulted force to evacuate the landing zone and seek cover.

Techniques for preparing a landing zone for an incoming air assault also tell the enemy the air assault is coming. During Vietnam three or four landing zones would be prepared with artillery, close air support, and helicopter gunship fires. The air assaulting forces would only use one or two. The effect on the enemy was to force them to react to all of the landing zones or wait until they could confirm the actual landing before they could commit any anti-air assault reaction force. The time gained allowed the air assaulted forces to establish a defensive perimeter or get off the landing zone.

During Vietnam, when it was believed that the enemy did not expect an air assault operation and no enemy contact was anticipated, some air assaults went in with no preparatory fires. Accompanying helicopter gunships immediately preceded the lift helicopters and artillery and close air support provided on-call support. The lack of use of preparatory fires forced the enemy as before to delay the commitment of any reaction force until after the air assaulted forces had landed. Other typically accompanying assets, command and control helicopters and forward air controllers, would also stay away from the area.

Similar to preparing several landing zones, the lift helicopters can also land at multiple landing zones. Completely landing is not necessary, only dropping below the tree line long enough for any notional troops to unload. These techniques are enhanced during operations at night. Unless the enemy is observing every helicopter and can reliably report whether or not troops exited the helicopters, the enemy has no idea where the helicopters dropped off their troops. Always flying with closed doors, and opening them only on the

landing zones, also prevents the enemy from determining whether or not the helicopters have unloaded. Again, the effect on the enemy is to force him to react to every possible landing or to delay until he has reliably determined the actual landing zones.

The actual preparation and use of multiple landing zones also deceives the enemy. Initially, he will not be able to determine which landing zone is the primary one or which has the main versus supporting efforts. The time necessary to build up forces will eventually indicate which landing zone is receiving the most equipment and personnel. However, techniques discussed earlier will prevent the accurate determination at least until the enemy gets eyes on the landing zone.

During heavy-light operations, in which a unit is task organized with an air assault capability and an armor or mechanized capability, additional deception options are available. If the enemy expects one or the other, an air assault or mechanized attack, the introduction of the other will interfere with his operational plan. The Japanese forces occupying Corregidor expected an airborne attack to proceed the amphibious attack. When they identified the amphibious attack they repositioned to defend. The U.S. airborne assault, which landed just as the amphibious attack landed caught the Japanese forces unprepared.

During the Vietnam War, the 101st Airborne Division used an armored force as a quick reaction force. Typically, armored and mechanized forces do not attack through the ugliest of terrain. An air assaulted force, usually of light infantryman will operate in terrain unsuited for mechanized forces. Ground elements can also be transported on trucks. Any opportunity to vary insertion methods, while balancing the risk of moving along cleared or uncleared routes, will aid in deceiving the enemy.

Using air assault forces during mid to high intensity conflict has different deception aspects. Typically the enemy has fire support, maneuver forces, and close air support dedicated to stopping an air assault. The enemy also has sensors to support the acquisition of the air assault. Air defense radar and counterbattery battery radar are two examples. The deception techniques discussed earlier are still applicable. However, the task may now be convincing the enemy that the air assault has landed in order to convince him to commit his forces early. Once he commits, the reaction forces can be destroyed. Once destroyed, the air assault operation continues to the actual objective.

Deception in support of mid to high intensity conflict may involve preparing a landing zone and flying a mass of empty helicopters in order to get the enemy to react in accordance with his operations plan. Most commanders have difficulty flying empty helicopters because of their limited numbers. Landing the helicopters at multiple landing zones will have the same effect. In that case he will be forced to distribute his assets against several potential targets. The false landing zones can be before or after the actual landing zones. The disadvantages of landing at the false landing zones are that you increase the risk of losing helicopters and/or troops to ground fire.

After the air assaulted force has been inserted and the ground operation has begun deception is still a valuable technique. Typically, helicopters continue to operate over the area of operations. They provide lift, fire support, and reconnaissance. The enemy is leery of the helicopters and avoids them. As in Vietnam, helicopters can be removed from the area in order to confuse the enemy as to the intent of the friendly forces. Temporarily removing the helicopters gives the enemy a sense of relief. His reaction and potential movement will expose him to other observation systems; thus to ground fires. Suddenly

moving helicopters into the area will catch enemy forces during movement. Constantly flying helicopters mask noises. Removing them from the area will force the enemy to practice better noise discipline.

The RANGER's experience in Somalia on Sunday October 3, 1993 lends itself to the practical use of deception. The operation was conducted similarly to previous operations in country. As in Vietnam, the Somalis had become accustomed to U.S. operating procedures. In response to the expected vehicle convoy that would extract the Rangers and prisoners the Somalis erected road blocks and set up ambushes.⁸¹ Command and control and gunship helicopters hovered immediately over the objective area acting as homing beacons to the Somalis. Varying their pattern of operations could have prevented the Somalis from determining the Ranger actions after only six missions.

Varying the pattern of operations must occur over several operations. On the day of the operation several deceptive actions could have supported the RANGERS. Multiple lifts of helicopters could have departed the assembly area enroute to several potential landing zones. The helicopters could have dropped off diversionary operations and forced the Somali reaction forces to spread out as opposed to mass on the actual target. Diversionary command and control and gunship helicopters operating over other areas would have provided the same effect.

A ground operation occurring before or during the air assault would have effected the Somalis. The ground force could have been on site before or immediately after the air assault arrived based on the anticipated response of the Somalis. A ground operation occurring simultaneously against another site would have had the same effect as diversionary air assaults.

Limitations

The scope of this monograph had to be limited due to time and length constraints. Initially, the author intended to incorporate the effects of the advent of U.S. information superiority on the use of deception in air assault operations. Literature that discusses tactical deception and its relationship with information superiority was very limited. However, the author believes that the advent of U.S. information superiority will not fundamentally change the goals of deception as stated in FM 90-2. The ability to see the entire battlefield may change the techniques for deception in air assault operations, (the author does not necessarily agree) but the target of the deception is still the enemy commander and his thought processes.

Unfortunately, time was not available to research operations by the French in Algeria, the British in the Falklands or the Russians in Afghanistan. Air assault operations were used during all of these operations and some different techniques are probably to be learned from them. Information about the Afghanistan operation is just now being released in English.

The intent of this monograph was to use history as the basis for developing techniques for gaining surprise through the use deception. Arguably, air assault operations have not been used during a mid to high intensity conflict of any length. The only examples would be in simulation against the world class opposing forces that support the Battle Command Training Program's exercises. A interesting investigation would involve a survey of those exercises to determine what deception techniques worked and which did not. Techniques that force the enemy to commit their reaction or reserve forces

against a false air assault, thus exposing them to lethal deep fires or maneuver would also be an interesting topic.

Chapter V

Conclusion

Clearly, deception has been used to gain surprise in the past and will continue to be a valuable multiplier in attaining surprise in future air assault operations. The use of deception is supported by theory, doctrine, and history. The writings of Sun Tzu, Clausewitz, and Jomini value the use of deception, to varying degrees, in attaining surprise against an enemy. U.S. doctrine places value on deception, unfortunately, structure does not resource deception planning cells in division and smaller organizations. U.S. doctrine does not discuss tactics, techniques, or procedures for deception. However, it places a high value on surprising the enemy and clearly recognizes the perils of the enemy surprising friendly forces.

History is perhaps the most ardent supporter of deception. Great commanders have used deception to surprise their enemy since the beginning of warfare. During World War II deception was used in support of most airborne operations in the form of dummies and sonic devices. The timing of airborne operations also effected the deceptive effects on the enemy. The Allied use of false airborne armies aided in the fixing of reserve forces that could have repulsed the D-day landings. Airborne operations were closely linked to ground operation in both the European and Pacific theaters of war.

In Vietnam, surprise was a necessary part of all air assault operations. The smallest enemy force prepared to engage incoming helicopters wreaked havoc on the force. Operations security was the most practiced form of deception in Vietnam. Initially, the Viet Cong and North Vietnamese were surprised by the ability of helicopters to introduce forces into an area of operation and to reposition forces with decisive results. They soon

determined patterns of operations and began to effectively attack air assault operations. Numerous techniques were developed to deceive the enemy as to where the helicopters are going. Most involved varying patterns of operations and using false insertions and preparations to lead the enemy to other areas or to force them commit any reaction piecemeal.

The author believes that much can be learned from past examples of deception. Young lieutenants know that surprise is a principle of war. They probably know what deception is and that it involves “fooling the enemy”. Do they understand that deception can preserve combat power and can turn an even fight into a uneven fight? The author does not think so. Techniques for deception should be trained at service schools and its should be encouraged at combat training centers.

History and doctrine demonstrate that the deception target is the enemy commander. As long as that is true, deception will be valuable. High technology does will not change the value of a well integrated deception plan. Regardless of the technological disparity between two forces, deception has proven to be worthy of consideration. Even between two high technology forces deception will valuable. Given the lethality of current weapon systems Sun Tzu’s desire to defeat an opponent without destroying his army has new meaning.

Finally, western civilization may look down on deception. That belief must be overcome. Deception is part of the art of war. The enemy will know we are coming. Helicopters do not have a “cloaking device”. They are noisy, throw up dust, and take up lots of space. High technology, information superiority, or the best equipped soldiers in the world will not guarantee surprise or hide the helicopter. Vietnam proved time and

time again that deception was a valuable tool in surprising the enemy during air assault operations. A well-planned, orchestrated, and synchronized deception plan can hide the helicopters.

ENDNOTES

¹ Infantry In Battle, The Infantry Journal Incorporated, Washington DC, (Richmond VA: Garrett and Massie, second reprinting, 1986, original 1939), 64.

² Carl von Clausewitz, On War, (New Jersey: Princeton University Press, 1976), 198.

³ FM 71-100-3, "Air Assault Division Operations". (Washington, DC, Department of the Army, 1996), xii.

⁴ Brent A. Cornstubble, "The Air Assault Raid: A Mission for the New Millennium". (School for Advanced Military Studies, US Army Command and General Staff College, Monograph AY 96-97), 20.

⁵ Barton Whaley, "Stratagem: Deception and Surprise in War". A report dated 17 April 1969. Located in the Combined Arms Research Library, Ft. Leavenworth KS. General Sir Bernard L Montgomery, World War II British general.

⁶ David M. Glantz, "Surprise and Maskirovka in Contemporary War". (Military Review, December 1988), 4.

⁷ Michael I. Handel, War, Strategy, and Intelligence. (New Jersey: Franklin Cass, 1989), 401.

⁸ "Setting the conditions" typically refers to operational criteria, such as destroying 50% of the artillery that can range the landing zone or destroying any armored counterattack force within 2 hours of the landing zone.

⁹ FM 101-5-1, "Operational Terms and Graphics", (Washington DC: Headquarters Department of the Army, 30 September 1997), 1-45.

¹⁰ Justin L.C. Eldridge, "The Myth of Army Tactical Deception". (Military Review, August 1990), 70.

¹¹ Ibid.

¹² Whaley, 99.

¹³ FM 90-2, "Battlefield Deception", (Washington, DC: Headquarters, Department of the Army, 3 Oct 1988), 1-0.

¹⁴ Whaley, 63.

¹⁵ FM 101-5-1, 1-45.

¹⁶ Center for Army Lessons Learned, "Deception", Newsletter 3-88 (US Combine Arms Training Activity; July 1988, Ft Leavenworth Kansas, 1988). 14.

¹⁷ Ibid., 15.

¹⁸ Ibid.

¹⁹ FM 90-2, 6-0.

²⁰ FM 100-5, "Operations", (Washington, DC: Headquarters, Department of the Army, 14 June 1993), 6-9.

²¹ Ibid., 6-10.

²² See FM 101-5-1 for definitions of these operations.

²³ FM 90-2, 4-1.

²⁴ Ibid., 4-3. Arguably, some of the wording used in FM 90-2 is inappropriate for maneuver terminology. That is a reflection of it's date and authorship. The author is of the opinion that primary authorship should be at Ft Leavenworth.

²⁵ Ibid., 1-15.

²⁶ Ibid., 1-29.

²⁷ Ibid., 4-13. Several other considerations are necessary. Are we forcing the enemy to act in accordance with his ideology, political training, or his cultural values? Are we presenting an opportunity for the enemy or something he can do nothing about. Are we reducing or increasing the threat to the enemy? Can we maintain the perception for the required amount of time? Will other operations compromise the deception or support it?

²⁸ Ibid., 5-12.

²⁹ Ibid., 5-14.

³⁰ FM 101-5-1, 1-136.

³¹ FM 90-2, 5-16.

³² FM 101-5-1, 1-54.

³³ FM 71-100-3, "Air Assault Division Operations", (Washington, DC: Headquarters, Department of the Army, 29 Oct 1996), 5-35.

³⁴ Ibid., 5-36.

³⁵ David M. Glantz, Soviet Military Deception in the Second World War, (New Jersey: Frank Cass and Company LTD, 1989), 33.

³⁶ Michael I. Handel, Military Deception in Peace and War, (Jerusalem, Israel: Magnes Press, The Hebrew University, 1985), 27. Michael I. Handel is a lecturer in the Department of International Relations at the Hebrew University of Jerusalem. He received his Ph.D. from Harvard University. One of the more modern writers on deception.

³⁷ Ibid., 7. "Stratagem" refers to deception at the strategic level of war. Several sources use the term to describe deception in general.

³⁸ Clausewitz, 198.

³⁹ Ibid., 201.

⁴⁰ Ibid., 203

⁴¹ Ibid.

⁴² Antoine Henri de Jomini, The Art of War, (Mechanics PA: Greenhill Books, 1996), 221.

⁴³ Ibid.

⁴⁴ Michael I. Handel, Sun Tzu and Clausewitz Compared, (Carlisle Barracks, PA: Strategic Studies Institute, US Army War Collage, 1991), 44.

⁴⁵ Sun Tzu, The Art of War, (San Francisco: Westview Press, 1994), 134.

⁴⁶ Handel, 39.

⁴⁷ B. H. Liddell Hart, Strategy, (New York: Signet, 1974), 34.

⁴⁸ Bradley K. Nelson, "Battlefield Deception: Abandoned Imperative of the 21st Century", (Monograph: School for Advanced Military studies, Command and General Staff College, AY 97-98), 10.

⁴⁹ Whaley, 199.

⁵⁰ The only difference is time available. The military decision making process(MDMP) is the same for all levels of operations. The process can be shortened based on time available. It is highly recommended that individual steps be abbreviated, not eliminated if time is constrained. Failure to consider each step, however briefly, will usually result in a poor mission analysis and more work in the long term. Worst case is a poor plan that fails to consider a critical piece of information. Typically operational level processes have more time available than tactical level processes. Therefore, operational level processes are recorded better than tactical processes. A complete discussion of the military decision making process is in FM 101-5.

⁵¹ Harold C. Deutsch, editor, Basic Deception and the Normandy Invasion, (New York: Garland Publishing, 1989), 18-4.

⁵² Ibid., 18-4.

⁵³ FM 100-6, Information Operations integrating concept team , "Information Operations: Tactics, techniques, and Procedures", DRAFT, June 1998, 6-53. This example of tactical deception was initially found in this draft manual. The bibliography includes several other historical sources for this operation.

⁵⁴ Ibid., 6-54.

⁵⁵ Ibid.

⁵⁶ Geoffrey Barkas, The Camouflage Story: From Aintree to Alamein, (London: Cassell and Company LTD, 1952), 204.

⁵⁷ FM 100-6, 6-54.

⁵⁸ Deutsch, 18-4.

⁵⁹ Ibid.

⁶⁰ E. M. Flanagan, Corregidor: The Rock Force Assault, 1945, (Navato CA: Presidio Press, 1988), 214.

⁶¹ David M. Glantz, The Soviet Airborne Experience, Research Survey Number 4, (Ft Leavenworth KS: U.S. Army Command and General Staff College, 1984), 46.

⁶² Ibid., 46.

⁶³ Department of the Army, "Cover and Deception", (Headquarters, 1st Infantry Division, report, 1967, located in the Combined Arms Research Library, Ft. Leavenworth KS), 7.

Deception against or using allied forces is risky business. During stability and support operations (SASO) deception will most likely involve allies or even humanitarian organizations. Such actions must be carefully coordinated and treated with the utmost care or they will be viewed as unfriendly or even uncooperative.

⁶⁴ Department of the Army, "VC/NVA Anti-heliborne Operations", (Headquarters, U.S. Military Assistance Command Vietnam, January 1967, located in the Combined Arms Research Library, Ft. Leavenworth KS), 2. Captured Viet Cong and North Vietnamese documents were the source for this information.

⁶⁵ Special equipment for marking landing zones includes: bean bag lights, bundles of chemlights, and strobe lights. Today most have an infra-red capability and are directional.

⁶⁶ "VC/NVA Anti-heliborne Operations", 6.

⁶⁷ Simon Dunstan, Vietnam Choppers: Helicopters in Battle 1950-1972, (London: Osprey Publishing, 1988), 27.

⁶⁸ Bernard W. Rogers, Operation Cedar Falls - Junction City: A Turning Point, (Washington DC: Department of the Army, U.S. Government Printing Office, 1989), 97. The account of Operation JUNCTION CITY is summarized from this book.

⁶⁹ Department of the Army, "Combat After Action Report: Operation Junction City", [Headquarters, 173rd Airborne Brigade(Seperate), 8 August 1967], enclosure 1, page 1.

⁷⁰ Rogers, 100.

⁷¹ Department of the Army, "After Action Report, Operation Junction City", (Headquarters, 1st Infantry Division, 8 May 1967), 18.

⁷² Rogers, 35.

⁷³ Department of the Army, "Tactical SOP for Counterinsurgency Operations", (Headquarters, 1st Brigade, 101st Airborne Division, 1 December 1966), 92.

⁷⁴ "Cover and Deception", 7.

⁷⁵ Department of the Army, "Lessons Learned, Operation NIAGARA/CEDAR FALLS", (Washington DC: Adjutant Generals Office, February 1967), 205.

⁷⁶ Ibid., 7.

⁷⁷ Ibid., 65.

⁷⁸ Department of the Army, "Operational Report, Lessons Learned", (Headquarters, 1st Brigade, 101st Airborne Division: 10 March 1967), 19.

⁷⁹ Timothy L Clubb, "Tactical Deception and Helicopter Operations", (Marine Corps Gazette: May 1994), 49.

⁸⁰ These categories are based on the authors research and simplify the analysis.

⁸¹ Mark Bowden, "Blackhawk Down", (Philadelphia Enquirer, 27 November 1997) Chapter 12. On line at <http://home.phillynews.com/packages.somalia/nov27/default27.asp>.

SOURCES CONSULTED

BOOKS

- Barkus, Geoffrey, The Camouflage Story: From Aintree to Alamein, (London: Cassell and Company, 1952).
- Clausewitz, Carl von, On War, edited and translated by Michael Howard and Peter Paret. (New Jersey: Princeton University Press, 1984).
- Deutsch, Harold C. editor, Basic Deception and the Normandy Invasion, (New York: Garland Publishing, 1989).
- Dewar, Michael, The Art of Deception and War, (New York: Sterling Publishing, 1989).
- Dunnigan, James F. and Nofi, Albert A., Victory and Deceit, (New York: William Morrow and Company, 1995).
- Dunston, Simon, Vietnam Choppers: Helicopters in Battle, (London: Osprey Publishing, 1988).
- Flanagan, E. M., Corregidor, The Rock force Assault, (Navato CA: Presidio Press, 1988).
- Gavin, John R., Air Assault, (New York: Hawthorn Books, 1969).
- Gavin, John R., Airborne Warfare, (Washington D.C.: Infantry Journal Press, 1947).
- Glantz, David M., Soviet Military Deception in the Second World War, (New Jersey: Frank Cass and Company LTD, 1989).
- _____, A History of Soviet Airborne Forces, (Portland: Frank Cass and Company LTD, 1998).
- Handel, Michael I., Military Deception in Peace and War, (Jerusalem: Magnes Press, The Hebrew University, 1985).
- _____, War, Strategy, and Intelligence, (Totawa, New Jersey: Franklin Cass LTD, 1989).
- _____, Masters of War: Sun Tzu, Clausewitz, and Jomini, (Portland: Franklin Cass LTD, 1992).

_____, Sun Tzu and Clausewitz Compared, (Carlisle Barracks PA: U.S. Army War College, Strategic Studies Institute, 1991).

Hart, B. H. Liddell, Strategy, (New York: Signet, 1974).

Infantry in Battle, (Richmond: Garret and Massie, 1986) Second reprinting by the Marine Corps association of original by The Infantry Journal Incorporated, Washington D.C.

Jomini, Antoine Henri de, The Art of War, (Mechanicsburg PA: Greenhill Books, 1996).

Marshall, S. L. A., Vietnam: Three Battles, (New York: Da Capo Press, 1971).

Montagu, Ewen, Beyond Top Secret Ultra, (New York: Coward, McCann and Geoghegan Inc., 1977).

Phillips, C. E. Lucas, Alamein, (Boston: Little Brown and Company, 1962).

Pitt, Barrie, The Year of Alamein, (New York: Paragon House, 1990).

Stanton, Shelby L., Anatomy of a Division: the 1st Cav in Vietnam, (Novato, CA: Presidio Press, 1987).

Sun Tzu, Art of War, translated by Ralph D. Sawyer. (San Francisco: Westview Press, 1994).

Wheatley, Dennis, The Deception Planners, My Secret War, (London: Anchor Press, 1980).

MANUALS

Department of the Army, FM 7-20, (The Infantry Battalion, Washington D.C.: Government Printing Office: Apr. 92).

Department of the Army, FM 71-100-3, (Air Assault Division Operations, Washington D.C.: Government Printing Office: Oct. 96).

Department of the Army, FM 90-2, (Battlefield Deception, Washington D.C.: Government Printing Office: Oct., 88).

Department of the Army, FM 100-5, (Operations, Washington D.C.: Government Printing Office: Jun. 93).

Department of the Army, FM 101-5-1, (Operational Terms and Graphics, Washington D.C.: Government Printing Office: Sep., 97).

Department of the Army, FM 100-6, Information Operations Concept Team DRAFT, (Information Operations: Tactics Techniques and Procedures, Ft Leavenworth KS: Jun., 98).

PERIODICALS AND ARTICLES

Albino, Robert A., "Deception Objectives: Scarecrows, Puppets, and Mannequins", (Infantry, Mar.-Apr. 1995), pp. 42-47.

Arneson, Charles W., and Starry, Michael D., "FM 100-6: Information Operations", (Military Review, Nov.-Dec. 1996), pp. 3-15.

Bunker, Robert J., "Advanced Battlespace and Cybermaneuver Concepts: Implications for Force XXI", (Parameters, Autumn 1996), pp. 108-120.

Clubb, Timothy L., "Tactical Deception and Helicopter Operations", (Marine Corps Gazette; May 94), pp. 48-49.

Corder, John A. and Mixson, Riley D., "Battle Space Control--Something is Missing", United States Naval Institute, Proceedings, Volume 124, Number 1, pp. 84-85.

Daly, John H., "Tactical Deception Gives an Edge", (Marine Corps Gazette; Aug. 83) pp. 24-26.

Degroat, Arthur S. and Nilsen, David C., "Information and Combat Power on the Force XXI Battlefield", (Military Review, Nov.-Dec 95), pp. 56-62.

Department of the Army, Military Review, (Future Operations/Future Warfare, entire journal, 14 articles, Mar.-Apr. 97).

Eldridge, Justin L. C., "The Myth of Army Tactical Deception", (Military Review, August 1990), pp. 67-78.

Fowler, Charles A. and Nesbit, Robert F., "Tactical Deception in Air-Land Warfare", (Journal of electronic Defense, Jun. 1995), pp. 37-44 and 76-79.

Glantz, David M., "Soviet War Experience: A Deception Case Study", (Journal of Soviet Military Studies, Oct. 1988).

Glantz, David M., "Surprise and Maskirovka in Contemporary War", (Military Review, Dec. 1988).

- Grange, David L. and Kelley, James A., "Recent and Not-So-Recent Thinking on information Operations and the Knowledge War", (Army Communicator, Spring-Summer 95), pp. 32-38.
- Havales, Paul A., "Deception Operations in Reforger 88", (Military Review, Aug. 1990), pp. 35-41.
- Kolenda, Christopher D., "Navigating the Fog of Technological Change", (Military Review, Nov.-Dec. 1996), pp. 31-40.
- Rhodes, J. E., "A Concept for Information Operations", (Marine Corps Gazette; Aug. 98) pp. 44-55.
- Riccardelli, Richard F., "The Information and Intelligence revolution", (Military Review, Sep.-Oct. 95), pp. 82-87.
- Rodgers, James L., "Information Warfare: Nothing New Under the Sun", (Marine Corps Gazette; Apr. 97), pp. 23-29.
- Silvasy, Stephen Jr., "Airland Battle, Future, The Tactical Battlefield", (Military Review, Jan.-Feb. 91), pp. 2-12.
- Smith, R. Powl Jr., "BCTP: Be Unpredictable, Take Risks, or Lose", (Field Artillery, Mar.-Apr. 97) pp. 16-23.

REPORTS AND RESEARCH PAPERS

- Builder, Carl H., and Nichiporuk, Brian, "Information Technologies and the Future of Land Warfare", (Santa Monica, California: RAND; 1995).
- "Deception Maxims: Fact and Folklore", a report for the CIA (New Jersey: Everest Consulting; Apr. 1980)
- Feer, Fred S., "Thinking-Red-In-Wargaming Work Shop: Opportunities for Deception and Counterdeception in the Red Planning Process", (Santa Monica: RAND Corporation, 1989).
- Glantz, David M., The Soviet Airborne Experience, Research Survey Number 4, (Ft Leavenworth KS: Command and General Staff College, Combat Studies Institute, Nov. 84).
- Rogers, Bernard W., Operation Cedar Fall-Junction City: A Turning Point, (Department of the Army, Vietnam Studies, 1989).

Stephenson, Roy R., Road to Downfall: Lam SON 71/9 and U.S. Airmobility Doctrine, (Ann Arbor: University Microfilm, 1991).

Whaley, Barton, Stratagem: Deception and Surprise in War, a bound report locate in the Combined Arms Research Library, Fort Leavenworth, Kansas, 1969.

Vanhorn, Fe, "Soviet Cover and Deception Doctrine", an academic paper in the Combined Arms Research Library, (Fort Leavenworth, KS: Command and General Staff College, academic year 1973-1974)

MONOGRAPHS

Cornstubble, Brent A., "The Air Assault Raid: A mission for the New Millennium". (Monograph, School for Advanced Military Studies, Command and General Staff College, Fort Leavenworth, Kansas) 1997.

Nelson, Bradley K., "Battlefield Deception: Abandoned Imperative of the 21st Century". (Monograph, School for Advanced Military Studies, Command and General Staff College, Fort Leavenworth, Kansas) 1997.

Scully, Michael A., "The Decisive Step: Incorporation of Deception into Tactical Mission Planning". (Monograph, School for Advanced Military Studies, Command and General Staff College, Fort Leavenworth, Kansas) 1997.

COMBAT AFTER ACTION REVIEWS OR REPORTS

Department of the Army, "Cover and Deception", a report discussing selected cover and deception operations in Vietnam, (Headquarters, 1st Infantry Division: 1967) located in the Combined Arms research Library, Fort Leavenworth, KS.

Department of the Army, "VC/NVA Anti-heliborne Operations", a study of Viet Cong and North Vietnamese Army anti-heliborne operations, (Headquarters, U.S. Military Assistance Command Vietnam: Jan. 1967) located in the Combined Arms research Library, Fort Leavenworth, KS.

Department of the Army, "Employment of Airmobile ARVN Forces in Counterinsurgency Operations", (Mar. 1966), located in the Combined Arms Research Library, Fort Leavenworth, KS.

Department of the Army, "Combat After Action Review, Operation Beauregard (Eagle Bait)", (Headquarters, 1st Brigade, 101st Airborne Division: Mar. 1966), located in the Combined Arms Research Library, Fort Leavenworth, KS.

Department of the Army, "Operational Lessons Learned", (Headquarters, 1st Brigade, 101st Airborne Division: 10 Mar. 1966), located in the Combined Arms Research Library, Fort Leavenworth, KS.

Department of the Army, "Operational Report-Lessons Learned", (Headquarters, 11th Combat Aviation Battalion: 15 May 1967), located in the Combined Arms Research Library, Fort Leavenworth, KS.

Department of the Army, "Combat After Action Review, Operation Junction City", (Headquarters, 173rd Airborne Brigade (separate): 8 Aug. 1967), located in the Combined Arms Research Library, Fort Leavenworth, KS.

Department of the Army, "Combat After Action Review, Operation Seward", (Headquarters, 1st Brigade, 101st Airborne Division: 6 Nov. 1966), located in the Combined Arms Research Library, Fort Leavenworth, KS.

Department of the Army, "Lessons Learned, Operation Niagara/Cedar Falls", (U.S. Army Adjutant General's Office, Feb. 1967), located in the Combined Arms Research Library, Fort Leavenworth, KS.

Department of the Army, "Lessons Learned", (Headquarters, II Field Force Vietnam, 2 Nov. 1967), located in the Combined Arms Research Library, Fort Leavenworth, KS.

Department of the Army, "After Action Review, Operation Junction City", (Headquarters, 1st Infantry Division: 8 May 1967), located in the Combined Arms Research Library, Fort Leavenworth, KS.

Department of the Army, "Combat After Action Review", (Headquarters, 3rd Brigade, 4th Infantry Division: 12 May 1967), located in the Combined Arms Research Library, Fort Leavenworth, KS.

OTHER

Bowden, Mark, "Blackhawk Down", (Philadelphia News, 1997) at website <http://home.phillynews.com/packages/somalia/nov27/default27.asp>.

Center for Army Lessons Learned (CALL) Bulletin No 3-88, July 1988, Internet access, CALL search engine.

Johnson, Stuart and Libicki, Martin, eds., "Dominant Battlespace Knowledge", (Washington D.C., National Defense University Press Book, 1995).

Lambert, Richard T., "Deception and the World-Class Opposing Force", The Center for Army Lessons Learned, News from the Front, Jan.-Feb. 96, pp. 1-4.

Tactical SOP for Counterinsurgency Operations, (Headquarters, 1st Brigade, 101st Airborne Division: 1 Dec. 1966), located in the Combined Arms Research Library, Fort Leavenworth KS.